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Technical Report No. 422

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Dolores Durkin
University of Illinois at Urbana-Champaign

March 1988

Center for the Study of Reading

TECHNICAL REPORTS

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Cambridge, Massachusetts 02238

The National Institute of Education
U.S. Department of Education
Washington, D.C. 20208

CENTER FOR THE STUDY OF READING

A READING RESEARCH AND EDUCATION CENTER REPORT

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The work upon which this publication is based was performed pursuant to Contract No. 400-81-0030 of the National Institute of Education. It does not, however, necessarily reflect the views of this agency. This research was also reported in Early Childhood Research Quarterly, 1987 (Sept.), 2, 275-300.

Abstract

This study of 42 kindergarten classes was designed to answer three questions: (a) What is done and for what amount of time to prepare kindergartners for reading and to teach reading itself? (b) What accounts for what is or is not done? (c) How do differences in children's abilities affect what is or is not done? To help answer the last two questions, interviews were held with teachers and their principals.

With teacher behavior as the focus, 21.6% of the 233 hours spent in classrooms was used for reading and reading-related activities. Phonics instruction was most apparent for the following reasons: (a) What was taught came directly from workbooks that were supplemented with ditto-sheet exercises; and (b) subject matter in the workbooks was reflected not only in items on report cards but also in first-grade teachers' expectations for entering first graders.

Whereas differences in kindergartners' abilities had minimal effects on the content of instruction, interest in identifying differences was the reason cited for the use of Gesell-like developmental tests. Poor scores on these tests had such consequences as a year's delay in entering kindergarten or placement in a "special" developmental kindergarten. The possibility that reliance on one methodology and whole class instruction may have combined to make some kindergartners appear to be "unready" was never referred to by the teachers or principals. Instead, interest was expressed in having transitional first grades to help kindergarten "failures."

A CLASSROOM-OBSERVATION STUDY OF READING INSTRUCTION IN THE KINDERGARTEN

The interest I have in young children and reading is hardly fleeting. My earliest research included two longitudinal studies of preschool readers, the first initiated in 1959 (Durkin, 1966). The date is significant, as it allowed for a look at early readers who had not been taught by parents with access to books designed to transform them into school-teachers-at-home (e.g., Bausell & Bausell, 1975; Ervin, 1979; & Ledson, 1975). Instead, subjects were helped to acquire literacy by parents--almost always mothers--who spent large amounts of time enjoying their children. Reading to them, answering their questions about words or anything else, responding to requests to draw a picture or make a letter, initiating and then responding to questions connected with trips that kept them close to home or took them far away--these are some of the ways in which the time was spent.

Even though current researchers sometimes refer to subjects in my research as "natural" readers and to their accomplishments as "natural" literacy, such descriptions do not reflect the data, if "natural" is equated with "not helped to learn" (Thomas, 1985). What the findings actually show is that some of the subjects started to read before entering school because they were individuals of whom it was said, "Tell them once what a word says and they seem to remember it forever." Others were portrayed by parents as "pencil and paper kids" who liked to scribble and were later helped to copy objects and, after that, letters and sometimes words. In a third group were children who, once given help with the sounds that letters stand for, grasped the alphabetic nature of written English and developed the ability to figure out simple words themselves. Relatively few subjects were in the third group, perhaps because parents worried about teaching sounds for fear of doing it "the wrong way." It is also significant to point out that some children fit more than one category. The "pencil and paper kids," for instance, often became curious about how words sound because they connected "knowing how words sound" with the ability to write them.

To sum up, then, the preschool readers in both studies acquired the beginnings of literacy with what is referred to in school settings as eclectic methodology. Because of the proximity of help, opportunities were available to learn words, to learn to print, and to learn letter-sound correspondences.

Since the two longitudinal studies were done when children entering first grade were still being characterized as unready to read (Durkin, 1968), the findings were sufficiently impressive as to prompt another longitudinal study. The core of this research was a two-year, half-day school program that started with 4-year-olds (Durkin, 1970). The development of the program, which had no pre-established expectations for achievement, was an attempt to put into a classroom setting the kinds of instruction and materials that had been effective with the preschool readers. The program was thus eclectic and included opportunities to learn to read words, to print and to compose, and to learn letter-sound correspondences; materials included anything that displayed print and that was of interest to the children. Results of this research were encouraging, too, and led to my offering a master's-level reading methodology course covering nursery school through grade 2.

The major paper for the course is a journal-like account of observations in classrooms. Each semester when I read the journals, it becomes increasingly common to find that when anything is done with reading at the kindergarten level, it almost always pertains to phonics taught to an entire class. References to workbooks and ditto sheets are also frequent. On the other hand, references to something like language experience material and to the composing efforts that now receive so much attention in the literature are almost nonexistent in the journals.

Meanwhile, an examination of a program for one of the annual ASCD statewide kindergarten conferences showed that teaching reading was discussed infrequently, whereas traditional concerns

for social and emotional development provided subject matter for many speakers. Equally prominent on the program was attention to Gesell-like philosophies about child development. Then, in the spring of 1985, the governor's office announced that money was going to be available to help support full-day kindergartens even though detailed information about the content of existing half-day programs was not available. Since nationally distributed journals had not reported documented accounts of what is occurring in kindergarten, it seemed more than time to conduct a classroom-observation study.

Goals of the Research

The central purpose of the research was to learn through classroom observations what is done with reading in kindergarten. Although it was assumed that the observations would supply information about instructional accommodations for differences in what entering kindergartners know and can do, interviews with teachers and principals were viewed as additional sources of information. The primary reason for the interviews, however, was to acquire explanations for what is or is not done with reading. Three questions, then, guided the development of the study:

1. What is done, and for what amount of time, to prepare kindergartners for reading and to teach reading itself?

2. What accounts for what is or is not done?

3. How do differences in children's abilities affect what is taught and practiced?

All the data were collected by two research assistants and myself.[1] The intent was to observe as many classrooms during the 1985-86 school year as time and financial support permitted. A more specific goal was to observe in as wide a geographical area in Illinois as was possible.

Preparations

Since the focus of the observations was to be teachers, preparations included the compilation of categories for coding their behavior. Writing interview questions for teachers and principals, and training research assistants to observe and interview constituted additional preparations.

Categories for Coding Teacher Behavior

Even though reading was the central concern, narrative records of everything the kindergarten teachers did, and for how long they did it, was the goal of the observations. The encompassing focus, it was thought, would provide a perspective for what was done with reading and also allow for identifying help with reading offered at unexpected times. The first step in preparing for the study, therefore, was to develop descriptions for all the teacher behavior likely to be seen. Initially, behaviors called "reading activities" were assembled (see Table 1). Identified next were reading-related activities (see Table 2). Whenever applicable, teacher behavior labeled "reading" or "reading related" was subdivided into "instruction" and "practice."

The majority of the other behavioral categories were named and defined prior to the trial observations. Nine more were added because of what was seen during the practice observations or the study itself. (The additional categories were rarely used; some, in fact, but once.) For the data analysis, all the categories were grouped under 1 of 5 headings, two of which have been identified (Reading Activities and Reading-Related Activities). The other three are named below with illustrative categories. The number following each heading indicates the number of categories that the heading encompasses.

Other "Academics" (N = 4)

Teaches numerical order
Teaches counting

Logistics (N = 7)

Attends to classroom routines
Supervises an activity

Miscellaneous (N = 17)

Teaches song or rhyme
Waits

Questions for Teacher and Principal Interviews

The main reason to interview teachers and principals was to get explanations for what was or was not being done to prepare kindergartners for reading or to teach reading itself. Consequently, a number of the questions had to do with: (a) obligations related to what was to be taught and the materials that were to be used; (b) origin of the obligations; and (c) the influence of report cards and first-grade teachers' expectations on that part of the kindergarten curriculum concerned with reading. (Questions about report cards were not in the original questionnaires; however, the trial interviews suggested their possible influence needed to be addressed.)

To acquire information about the means used to match instruction with kindergartners' abilities, teachers and principals were both asked about testing practices and the uses made of test data. Teachers were also questioned about the procedures they follow in organizing a class for instruction. Whenever a teacher had an aide, she was asked to describe what the aide did.

Some of the additional questions were about the teachers and principals themselves: educational background, professional experiences, and opinions about when reading instruction ought to be initiated.

Trial Observations and Interviews

Preparations for the study included two trial observations and four trial interviews, none of which figure in the data that will be reported.

To provide the two research assistants with practice in recording, timing, and coding teachers' behavior, the three of us observed together in two classrooms. Observation sheets had the following headings:

Time	Activity	Audience	Source

When each activity began and ended was noted in the first column. The activity itself was described in the next column. Who was involved in the activity (whole class, small group, individual child) was recorded next. The fourth column allowed for information about the source of the activity--for instance, a workbook, manual, or music book. Immediately following an observation, all the activities were coded. The total time in minutes that each activity consumed was then noted in the first column. For each observation, the final sheet showed a summary that listed the activities seen and the total time allotted to each.

For the first trial observation, perfect agreement was found for the ways in which the teacher's behavior was both coded and timed. Comparisons for the second observation, which was done a week later, revealed one-minute discrepancies in the timing of three behaviors. (The classifications themselves were identical.) For all three cases, two observers agreed and one did not. In each instance, the discrepancy stemmed from the fact that the use of one minute as the basic unit for timing activities was too long. That is, what the observed teacher did on three occasions was so brief that seconds were required to describe the duration accurately. The decision was to continue using one minute as the basic unit on the assumption that its use would not prevent the goals of the research from being realized.

To get help with interviewing, the research assistants attended interviews held with the two observed teachers and their principals. All three of us wrote responses to the questions; however, I conducted the four trial interviews. Later, responses were read aloud by the three of us to allow for comparisons. Again, no discrepancies were found.

Additional Decisions

Once it was decided that each class was to be observed on two successive days, a subsequent decision was to postpone interviewing a teacher until at least the first observation was done. It was thought that this sequence would make a teacher's answers more meaningful. Interviews with principals were scheduled at their convenience.

One further decision was that the present writer would check the record sheets for every observation with each observer. In turn, my own records would be checked by at least one research assistant. As it turned out, the three of us were present for most of the checking sessions at which time how a teacher's behaviors were coded was the main concern. Reaching agreement presented no problems, perhaps because of the similarity in what was seen from one classroom to the next. To keep me informed about the whole of the study, one more decision was that answers provided in each interview would be repeated during the weekly research meetings.

Observed Classes

Observations began in September, 1985, and concluded in May, 1986. Information about the observed classes is listed below; comments follow.

School systems	15
Schools	25
Teachers	29
full-day programs	3
half-day sessions	26

Observed classes	42
full-day	3
morning	21
afternoon	18

As the list of data indicates, 42 classes were observed, each for two successive school days. On the assumption that Fridays and Mondays, which were considered successive days, are often atypical, observations were scheduled in a way that covered with almost identical frequency all five days of a school week. By the time the study ended, classes had been observed for a total of 13,988 minutes (233 hours and 8 minutes).

Nothing was known about any kindergarten prior to an observation. School systems that varied in size and setting (urban, suburban, rural) and were located in widely scattered parts of Illinois were the primary considerations in selecting sites. The denial of permission to observe also affected which kindergartens were observed.

One denial was from a school system that has full-day kindergartens, which, as the information listed earlier shows, were rarely observed. Here, however, it is relevant to note that at the time the research was conducted, an Illinois state report indicated that only 8% of its school systems offered full-day kindergarten programs (Illinois State Board of Education, 1985b).

The discrepancy between number of teachers (N = 29) and number of classes (N = 42) is accounted for by two facts. First, both the morning and afternoon classes of 11 teachers were observed in order to see whether teachers alter what is done with each class as a way of matching a program with children. Second, one teacher had three classes per day, all of which were observed. The atypical arrangement was in a school in which there was only one kindergarten teacher. According to the principal, having the three classes represented an attempt to reduce class size in order to foster better instruction. Providing the teacher with a full-time aide was described as one further attempt to improve the program.

Among the 29 teachers in the study, 10 had aides, four for as little as 30 minutes per class. Three teachers, on the other hand, had full-time aides. Whether a teacher had help was usually related to class size. The number of children in each of the observed classes ranged from 14 to 28 with a mean of 20.6.

Results

The generous amount of data that the study yielded will be reported in relation to their origins: classroom observations and interviews. Essentially, the observation data provide descriptions whereas the interview data suggest explanations.

Classroom Observations

Data from the observations divide between those concerned with allotment of time and those that describe accommodations made for differences in children's abilities.

Allotment of time. As mentioned earlier, the categories for describing how the observed teachers spent their time were divided into five groups, which are re-identified below. Following each is the

percentage of the 13,988 minutes that is accounted for by each group. The total of the percentages exceeds 100 because numbers are rounded off.

Reading Activities (10.8%)

Reading-related Activities (10.8%)

Other Academics (2.6%)

Logistics (50.8%)

Miscellaneous (25.0%)

When every teacher-behavior category used in the study was examined, "Attends to classroom routines," grouped under "logistics," consumed the largest amount of time--22.9% of the total time spent in the classrooms. Included in this category are such teacher behaviors as takes attendance; collects money for milk, bus, pictures, field trip, etc.; prepares children to leave the classroom; accompanies children to and from the lavatory, playground, etc.; and helps children with clothing.

"Supervises," also part of the "Logistics" group of behaviors, took up the second largest amount of time (19.3% of the total time). This is the case even though different categories accounted for any switch from supervising to providing help with what was being supervised. Included under "supervises" is supervision of assignments, of child-selected activities, and of outdoor play.

The teachers' time that was allotted to reading and reading-related activities, the major concerns of the study, is shown in Tables 1 and 2. To be noted in Table 1 is that of the 18 topics listed under reading activities, the four concerned with phonics (teaches sounds that letters record; works on blending sounds; attends to auditory discrimination; works on printing with attention going to the relationship between sounds and spellings) consume 40.7% of the time. Since letter naming was almost always directed by commercial materials that introduce letter names either to prepare for phonics or to teach phonics, it seems correct to add the time spent on letter names to that already reported as having gone to phonics. When that is done, work with phonics takes up 70.9% of the time spent on "reading activities."

[Insert Tables 1 and 2 about here.]

Accommodations for differences in abilities. One of the two reasons for including interviews in the research was to acquire information about the means used to accommodate differences in children's knowledge about, and abilities in, reading. It was assumed, however, that the observations would not only contribute to that information but also make it possible to learn whether what was said and what was done to cope with differences were similar. To avoid repeating interview data about accommodations, all that will be provided here are general statements about the classroom observations that pertain to the match between children and reading and reading-related instruction.

To begin, regardless of what was observed, it was typically done with the whole class. Exceptions were most common when an aide was present. In these cases, a teacher might direct an activity with part of the class while the aide did something else with the others. In time, the groups were exchanged. The activities were rotated, then, not individualized.

The same was true of "center activities," which were located in various parts of a classroom. Whether these activities and the materials used were academic or nonacademic, schedules were such that every

child usually got to them all during the course of a week. (Centers, which were sometimes called "stations," were commonly discussed on Monday.)

While the children were engaged in center activities--also referred to in some schedules as the "Work Period"--teachers occasionally spent time with an individual or a small group attending to something else for which extra help was needed. In four classrooms, teachers used the time allotted to center activities to work with small groups on a variety of topics. In these cases, the time spent with a group was brief but *was* an attempt to offer both extra help and extra challenge. Even in these four classes, however, new phonics content was presented to the whole class following a pattern that was very common: one letter and sound per week.

Other facts derived from the observations that point to the conclusion that the kindergarten programs were "a given," not a response to particular children, include the following:

1. Whenever morning and afternoon sessions taught by the same teacher were observed, afternoon activities duplicated those seen in the morning.

2. When the three classes taught by one teacher were observed, all three did the same things on the same day, even though the unusual organization had been described earlier as an effort to reduce class size so that the kindergarten program could be improved. (The number of children in the three classes was 15, 16, and 20, respectively. As mentioned earlier, the teacher had a full-time aide.)

3. Whole-class activities were as common at the end of the school year as at the beginning even though the teachers had had numerous opportunities to learn about differences in the children's abilities.

Further support for the conclusion that differences in abilities had little effect on the nature of the instructional programs is cited as data from the interviews are reported.

Information about the Interviewees

Data describing the educational background and teaching experience of the 29 interviewed teachers, all of whom are women, are summarized in Table 3. Information about the 24 interviewed principals, four of whom are women, is in Table 4. (Twenty-five schools were involved in the research, two of which have the same principal.) As the data in Table 4 point up, only 3 of the 24 principals had taught in the K-III range. This corresponds to a finding cited in a report of an early childhood education survey conducted in Illinois (Illinois State Board of Education, 1985a): "According to the responses of elementary principals themselves, elementary school principals in Illinois, in general, have little or no teaching experience at the pre-kindergarten, kindergarten, or primary grade levels" (p. 32). As will be seen, the small number of principals in the present study who had taught young children placed limitations on the information derived from interviews. That is why teacher interview data are discussed at some length whereas much less space is used to report findings from the interviews with principals.

[Insert Tables 3 & 4 about here.]

Teacher Interview Data: The Programs

The first group of data that will be reported has to do with the teachers' explanations for what was or was not taught insofar as reading is concerned. Responses to the question, "Do you think reading ought to be taught in kindergarten?" are also included in this group of data.

Explanations for what was taught and practiced. When questions for the teachers were being prepared, it was taken for granted that commercial materials influence to some degree what is done with reading. Therefore, interviews included questions that asked the teachers about the materials--both commercial and teacher-made--they used, about the materials they were obliged to use, and about whom or what made them feel obligated to use whatever materials were named.

It was further assumed, but with less certainty, that first-grade teachers' expectations for beginning first graders are a second source of influence. That is why the kindergarten teachers were asked whether the first-grade teachers in their building assumed children would know and be able to do certain things related to reading because of their enrollment in the kindergarten program. Exactly what the expectations were--if they existed--and how the kindergarten teachers learned about them provided content for still other questions.

As mentioned earlier, it was the two trial observations that accounted for questions about the influence of report cards, since this writer was unaware of their significance for the research.

As it turned out, interview data repeatedly confirmed classroom observation findings: Commercial materials that emphasize phonics have a major and encompassing impact on what kindergarten teachers do with reading. Discussions of report cards in the interviews, plus the cards themselves, also made it clear that the commercial materials directly affect what is graded. (In one school system, for example, the report card lists the 20 consonant sounds that a given workbook covers in the order in which the workbook deals with them. It also lists the 13 words introduced.)

With three exceptions, commercial materials in the kindergartens were the beginning workbooks in the six different basal reader series that the school systems used. [The exceptions were in three classrooms in which *Alpha Time* materials (Reiss & Friedman, 1981) were the teachers' own choice. This program uses inflatable "letter people," dittos, booklets, and records to teach consonant and vowel sounds and blending.] The content of the basal workbooks, referred to as readiness instruction by their publishers, prepares children for the next most difficult part of the basal series, namely, the first preprimer. It was not surprising to learn, then, that first-grade teachers did have expectations for the reading component of the kindergarten curriculum, which included whatever children needed to know and be able to do in order to start the first preprimer. The interview data (plus the observation data) support, therefore, the following pattern of events:

1. A school system adopts a basal reader series that includes one or two readiness workbooks, which are used in kindergarten.

2. The reading readiness workbooks teach consonant sounds--rarely vowel sounds--and a relatively small number of words, which are in the first preprimer. To prepare for work with letter-sound correspondences, earlier pages in the workbooks attend to exercises for visual discrimination, naming letters, and auditory discrimination. Some workbooks also give attention to printing when sounds are taught. Since nonbasal publishers provide a generous number of exercises for phonics, supplementary ditto-sheet assignments are used, too, often as center activities.

3. Topics dealt with in the readiness workbook(s) are prerequisites for the first preprimer in the basal series. Since use of the preprimer marks the beginning of the first-grade instructional program, first-grade teachers expect new students to know what readiness workbooks teach. These expectations are either assumed to exist by kindergarten teachers or are communicated "informally" by the first-grade teachers rather than through formal channels such as scheduled meetings.

4. Kindergarten report cards have been available in the past; now, however, they include items like "letter naming ability" and "ability in auditory discrimination." The newer cards vary in specificity ("Knows consonant sounds" vs. "Knows the following sounds: . . ."); but all make it clear that phonics is central to what the cards refer to as "Reading Readiness." Even on the one card that replaces "Reading Readiness" with "Language Arts," topics related to phonics dominate the nine items listed. In one school system, what teachers and administrators called the "January insert" is an addition to a more traditional report card. The insert has four sections that cover the ability to name (a) all the letters in capital form; (b) all the letters in lowercase form; (c) 21 consonant sounds; and (d) five long vowel sounds. According to both teachers and administrators, the insert reflected the interest of the Board of Education and parents in making the kindergarten program more academic. The additional items themselves reflect the content taught in the readiness workbooks for two different basal series, both used in the school system.

Although the questionnaire for teacher interviews did not include questions about parents, teachers who mentioned them stated that parents like the academic emphases and are especially supportive of phonics. It seems appropriate, therefore, to ask, what about the teachers? Did they agree with the parents or, on the other hand, did they express any opposition to the expectation that they would use the basal reader workbooks, all of which concentrated on topics related to phonics?

Opinions about offering reading instruction in kindergarten. "Do you think reading should be taught in kindergarten?" was one of the questions posed to the teachers. Given the fact that phonics instruction or practice was seen in every classroom, it is logical to think that all the teachers would respond positively. In fact, however, answers to the question were mixed. Why this was the case can be explained with an equation that gradually became clear: The teachers viewed phonics not as reading instruction but as readiness instruction. It can be argued that at least three factors account for such an equation.

One reasonable explanation has to do with the fact that the workbooks the teachers used to teach phonics are called readiness materials. A second likely explanation relates to the kindergarten report card, specifically to the fact that with only one exception, various aspects of phonics are consistently grouped under "Reading Readiness." The third proposed reason for the teachers' equating phonics with readiness instruction is suggested by what the teachers both said and did: Teaching phonics was not connected with learning words.

The fact that phonics instruction was only rarely placed in the context of recognizing written words was documented during the observations. Specifically, what was taught was related more often to pictures and letters than to words. Even when work with blending was observed--and it was not seen very often--the dominant focus was on the blending itself, not on how such an ability provides assistance with knowing what written words "say." Interestingly, then, it was the fact that phonics was treated as an end in itself that may have encouraged the teachers to equate phonics not with reading instruction but with readiness instruction. Viewed as readiness instruction, phonics was acceptable.

As mentioned, all the teachers were asked, "Do you think reading ought to be taught in kindergarten?" As was indicated, too, answers were mixed. The most common response (N = 16) began with something like, "It depends." For 15 teachers, whether reading ought to be taught depends on whether children are ready to learn to read. For the other teacher, it depends on how "reading instruction" is defined.

This group of responses was especially interesting in light of the fact that (a) none of the 29 teachers in the study ever questioned whether kindergartners are ready for phonics, and (b) the 15 teachers

who thought reading should be taught only to children who are ready presented phonics as a whole-class activity. It is also relevant to note in this context that none of the 25 school systems had an articulated policy for children who arrive in kindergarten already able to read. To the interview question that inquired about such a policy, the customary answer was, "It would be up to the teacher to decide what to do." In only one instance did a prekindergarten reader receive special help: She spent 1 1/2 hours daily in a first grade. Even in classrooms in which the teacher identified for the observer one or more early readers, nothing extra was done to add to their abilities.

Remaining responses to the question inquiring about the advisability of teaching reading in kindergarten divided between: "Yes" (N = 2) and "No" (N = 11). Of the 11 teachers who expressed opposition to teaching reading, seven said that kindergarten should be responsible only for readiness instruction. Elaborations varied and included comments like: "The children should begin to look at letter combinations, but there's not a lot they can do yet because they're not ready."

The response of another teacher who did not favor teaching reading in kindergarten was unique:

> "I taught reading before to a small group who were ready for it, but both they and the other children resented it. And it didn't make them better students in first grade."

Three additional teachers did not support reading instruction in kindergarten for reasons that reflect views of child development that were popular decades ago, primarily because of the influence of Arnold Gesell (Durkin, 1968). The three had the following to say:

> "If the kids are ready, they'll do it (read) themselves. You don't need to formally teach it."
>
> Five-and-a-half-year-old children have the ability to move their eyes left to right but not to return. They're visually not ready. In the Gesell philosophy, if the child is not forced, it will happen naturally and more easily.[2]
>
> When the children are age 5, the teacher spends eight months. At age 7, the teacher would only need to spend two weeks. Kindergarten children need more dramatic play, left-to-right automatic behaviors, and eye-hand coordination.

The three teachers are quoted now because, as will become clear in subsequent sections of the report, Gesell-like philosophies are currently influential to a degree that was unexpected.

Opinions about half-day vs. full-day programs. Gesell-like philosophies surfaced when the 29 teachers were asked what they thought about full-day kindergarten programs. For example:

> "For children developmentally ready, a full-day is fine but the afternoon sessions can't be loaded."
>
> "They (the children) are not developmentally ready."
>
> "An important part of childhood is playing, and this is the last year for them to play."
>
> "A full-day program would be baby-sitting in the afternoon because most still take naps. They are developmentally not ready. They need time to be children."

In addition to identifying Gesell-oriented philosophies, the question about full-day vs. half-day programs uncovered two other opinions commonly held by the 29 teachers in the study. The two opinions are characterized well in the following comments:

> "Having children for a full day is better than having poor care for them elsewhere (e.g., daycare centers) for half a day."
>
> "The full day will increase parents' expectations. They'll want even more academics, like teaching reading."

Teacher Interview Data: Matching Programs to Abilities

Because it was assumed that evidence about accommodations or the lack of them would become apparent during classroom observations, interview questions concentrated on testing practices and the uses made of test results. Other questions inquired about grouping practices for instruction in order to learn why the organizational patterns seen during the observations were used. Whenever a teacher had an aide, she was also asked to describe what the aide did.

Data for all these questions are reported next, starting with responses concerned with testing practices. The tests identified during the interviews divide between those that will be called "developmental" and others that are academic in nature. The former are discussed first.

Nature of developmental tests. "Developmental" refers to tests said to assess children's maturation levels with subtests that include motor (gross and fine), visual-motor, visual, and auditory tasks. These tests might therefore have children walk forward, backwards, and sideways; cut with scissors and lace shoes; trace, copy, complete, and draw certain shapes and patterns; identify likenesses and differences in objects and pictures; assemble puzzles; and identify differences in the volume and source of various sounds. Commonly, too, a draw-a-man test is included, as are questions about the children themselves and their families. Probably the best known developmental test is the Gesell *School Readiness Test* (1978), which assigns developmental ages based on test performance. Developmental testing is expensive and time-consuming, as the tests are individually administered. In some cases, only trained individuals are supposed to give the test.

Administration and use of developmental tests. When interview questions about testing practices were prepared, the possibility that more than half the school systems that would end up in the study administer developmental tests was not expected. The fact that the value of such tests for predicting school success has been questioned by studies carried on over several decades (Arter & Jenkins, 1979) may have accounted for the failure to predict their popularity.

As it turned out, 9 of the 15 school systems in the study administer developmental tests either during the spring prior to the start of kindergarten or close to the beginning of the kindergarten year itself. Interview data further disclosed that it was the intention of two additional school systems to initiate such testing "next year." Had the research been done one year later, then, 73% of the schools would be administering developmental tests. Among the nine schools already using one, the most frequently selected tests were the Gesell, which was mentioned above, and the *Early Prevention of School Failure* test (Heiniger, 1979), referred to as "the Peotone test" because it was developed in Peotone, Illinois. According to promotional material, this test is used "in over 50,000 schools throughout the United States."

How seriously results of developmental tests are taken is reflected in reasons cited for giving them:

> "to identify developmental lags"
>
> "to see who is developmentally ready"
>
> "to identify those who should stay home for a year"
>
> "to have children placed in the motor class"
>
> "to determine who goes to the developmental kindergarten"
>
> "to spot maturity levels and determine readiness for school"

The term "motor class," used in one of the explanations listed above, refers to a "developmental kindergarten" in which enrollment is reduced, presumably to allow for additional help for children judged to be unready for regular kindergarten programs based on the results of a developmental test. Such children spend one year in each of the two kindergarten programs. Of the 15 school districts in the study, four had developmental kindergartens. Two requests to observe in one were denied.

Whether developmental test scores had anything to do with the frequent references by teachers to retaining children in kindergarten was never clarified, although one teacher did state that she checked Gesell scores "if problems arise." What *was* identified, however, were transitional first grades in 4 of the 15 school districts. These are for children who had attended kindergarten but were not thought to be ready for first grade. Again, it was taken for granted that children would spend one year in the transitional first grade and the next in a regular first-grade classroom. In yet another district, children who "failed" kindergarten spent the following year attending kindergarten in the morning and a first grade in the afternoon.

Here, it is relevant to refer to a review of studies presented at the 1986 AERA meeting, thus close to the time when the present study was concluded (Shepard, 1986). Interestingly, the Gesell *School Readiness Test* is singled out in the report as being an especially questionable instrument for making decisions about a child's readiness for school. In concluding her review of the literature, Shepard makes still other observations that are pertinent:

> Despite the promises, providing an extra year before first grade does not solve the problems it is intended to solve. Children . . . show virtually no academic advantage over equally at-risk children who did not have the extra year. Furthermore, there is often an emotional cost associated with staying back even when parents and teachers are very enlightened about presenting the decision to the child (pp. 11-12).

Of equal significance for the present study is the final conclusion reached by Shepard:

> Other alternatives exist to solve the unreadiness problem but they are not so popular as simple answers such as a new test or a new grade level. . . . If one looks at existing research, successful programs are those which responded to individual differences (p. 12).

Administration and use of academic tests. At the start of the year, 14 of the 29 teachers in the study administered tests that dealt with the recognition of colors, shapes, numbers, and letters. Three tests also assessed counting ability, and five had the children print whatever they could--individual letters or their names. Unexpectedly, only 4 of the 14 teachers used the results for instructional decisions.

The four said that children requiring extra help was their concern. The other 10 teachers said it was useful to have such information early in order to report progress, or the lack of it, during parent conferences.

Seventeen teachers administered similar tests prior to the end of a "marking period" or just before parent conferences. End-of-unit tests in basal reader workbooks were also administered and were part of the data used both for conferences and for marking report cards.

As mentioned, the most common use made of all the academic tests for instructional purposes was to identify, and give additional help to, low achievers. One of the general impressions that the observations prompted was effectively pinpointed by a teacher when she was interviewed. Asked what she thought was especially difficult about teaching kindergarten, this teacher replied, "There is great variation in what comes to you." She then added, "But by the end of the year, they're more leveled out."

Clearly, kindergartens have not escaped the current interest in testing; for standardized achievement tests were given, too. In two school districts, the end-of-the-year test was the *Iowa Test of Basic Skills* (Lindquist & Hieronymus, 1972). In two others, the *Metropolitan Readiness Test* (Nurss & McGauvran, 1976) was administered. A test from the *SRA Achievement Series* (Naslund, Thorpe, & Lefever, 1978) was the choice of another district, whereas two more chose the *Stanford Early School Achievement Test* (Madden, Gardner, & Collins, 1982).

Why the first three standardized tests just named were used can be summarized with descriptions like "to check progress" and "to provide information for the first-grade teachers." Use of the *Stanford Early School Achievement Test*, which was administered to five classes, was explained with greater variety. Even though one kindergarten teacher described this lengthy test as "a terrible waste (of time)," another in the same school system said results were used to decide "who goes to summer school." How a teacher in another school system defined the purpose of the test was unexpectedly candid: "to put the results in their (the children's) folders."

Information about classroom organization. Responses to interview questions about classroom organization closely paralleled the conclusions reached from the classroom-observation data. They thus indicated that (a) much of what was done was done with the whole class; (b) when the teachers worked with smaller groups, activities were usually rotated from group to group, not individualized in relation to abilities and needs; and (c) when special help was offered to individuals or small groups, it typically was remedial rather than challenging in nature.

Some of the specific reasons cited by teachers for working with the whole class rather than with small groups or individuals are quoted below.

> "I can meet the children's needs without grouping. Doing different things with different children is distracting."
>
> "I don't use small groups for anything because I do not have an aide."
>
> "Parents and the administration do not want ability grouping. It's unfair."
>
> "The quicker learners can help the slower ones. Segregation is not the answer."

Responsibilities of teacher aides. Ten of the 29 teachers had aides, four for as little as 30 minutes per class. At the other extreme were the three teachers with full-time help. Two had this amount of help because of large enrollments; the other had a full-time aide because she had three classes.

Teachers' descriptions of what their aides did divided among five responsibilities, which are listed below. After each is the number of times the responsibility was named:

Helps supervise activities. (N=4)

Gives assistance to slower children. (N=4)

Works with one group while teacher is with another. Groups are then exchanged. (N=4)

Does clerical work. (N=2)

Grades worksheets. (N=1)

Principal Interview Data

As was mentioned earlier, a lack of teaching experience with young children is one of the most likely reasons why principal interview data are not nearly as informative as those collected when the teachers were questioned. The fact that only 2 of the 24 principals had taught kindergarten, for instance, may explain why questions were sometimes responded to, not with answers, but with a reference to the kindergarten teachers in the building:

"I have good people and feel they know what they're doing. I trust them."

"I have the good fortune to have experienced teachers."

"The teachers are the experts."

"The kindergarten person has the expertise."

The lack of experience in teaching young children probably explains, too, why the information derived from the principal interviews was less specific than what was learned when the teachers were interviewed. Asked what the goals of kindergarten ought to be, for example, it was not atypical to hear the principals say something like:

"It (the kindergarten) should provide for socialization as well as address cognitive skills and development of attitudes."

"It should be socialization and should approach basic skills such as phonics, reading, math, and language arts."

"It should be a balance between social, emotional, and academic."

Even though vague and global responses like those just quoted were typical, the singular and specific influence that commercial materials have on what is done with reading in the kindergarten was neither denied nor questioned by any principal. On the other hand, references to report cards and first-grade teachers' expectations as additional sources of influence were less common than was the case in the teacher interviews. This finding does not cast doubt on the influence of either the report cards or the first-grade teachers' expectations, however, as both directly reflect the content that the commercial materials cover.

Another pattern emerged when the principals were asked how kindergarten teachers new in the school system learn about their responsibilities. In this instance, the most common reply referred to a written curriculum guide. Even though close to one-third of the teachers also mentioned the curriculum guide or something similar to it, their characterization of such material included descriptions like "not very helpful" and "sketchy." In the end, both the principals and the teachers supported the conclusion that specific information about kindergarten responsibilities and about first-grade teachers' expectations is communicated not in formal meetings or curriculum guides but during in-the-hall and lunchroom discussions.

Probably the principal interview data can be summed up most accurately and briefly with the statement that the principals' knowledge of the developmental and the standardized tests administered to kindergartners was more extensive and detailed than was their knowledge of kindergarten programs. Especially noticeable was the principals' acceptance of developmental tests. One principal even stated that the Gesell testing in his school system "is one of its most successful accomplishments." He explained his enthusiastic endorsement by saying, "It (the testing) avoids the situation of children arriving in first grade unready to sit still."

Having reported the classroom observation and interview data, I'll next comment on some of the shortcomings of the research before adding to the discussion of the findings.

Limitations of the Study

The attention that the reported data merit depends, first of all, on the accuracy with which they portray the observed kindergartens. How seriously the findings should be taken is also affected by the extent to which the participating classes are a representative sample of kindergartens elsewhere. Unfortunately, documentation of what goes on elsewhere is practically nonexistent. The only report found (Meyer, Linn, Mayberry, & Hastings, 1985) describes a study whose purpose was to measure "the variance in literacy-related instruction in kindergarten" (p. 3). Eleven half-day classes from two school districts and three full-day classes from a third district were each observed nine times. The variance found was directly related not only to the use or nonuse of basal materials but also to the amount of basal materials used. Specifically, the least amount of literacy-related instruction occurred in the three full-day classes (District C), only one of which used commercial materials. In this case, the *Peabody Language Program* (Dunn, Smith, & Dunn, 1981) was the choice. Although the two districts with half-day classes both had basal materials, one (District B) used the readiness workbooks from one publisher whereas the other (District A) used readiness materials from two different publishers plus ("for the last few weeks of the school year") three preprimers from a series published by a third company. Predictably, "District A teachers, with their substantial reading curriculum of phonics concepts and vocabulary, averaged at least twice the amount of time in decoding that District B teachers spent and over four times the number of minutes teachers in District C allocated" (p. 15). The only explanation offered in the report for the variation in materials used is that the districts had "different philosophies about early childhood education" (p. 4). Nothing is said about report cards or, for instance, about first-grade teachers' expectations.

Although the districts included in the present study resemble in their use of commercial materials only what is referred to as District B in the Meyer et al. research, two general findings are common to the two studies: (a) what is done with reading and reading-related activities is directly affected by commercial materials, and (b) what is done with a morning and afternoon class instructed by the same teacher is practically identical.

It should be noted that even though studies of kindergarten programs are almost nonexistent, articles about kindergarten have been increasing as interest in writing has been mounting. Many such articles are written by "reformers," who refer to the prominence of phonics instruction in kindergarten but

offer no documentation for their claims (e.g., Dyson, 1984; Taylor, Blum, & Logsdon, 1986; Templeton, 1986). After saying that she has "seen many kindergartens," for example, Dyson states: "The emphasis of many early literacy lessons is on learning the details of the (writing) system, particularly the names, sounds, and formation of the alphabet. While the importance of alphabetic knowledge is obvious and not questioned here, a literacy program focused on isolated skills confronts children with the pieces of the literary puzzle one at a time, denying them an opportunity to view the puzzle as a whole" (p. 264).

Even though nothing that has been found in the literature contradicts the findings reported for the present study, verification that the observed kindergartens *are* a representative sample awaits reports by researchers who have observed in other school systems in order to learn what they are doing to prepare kindergartners for reading and to teach reading itself. All that can be done now, therefore, is to consider limitations of the present study.

One obvious limitation is that each of the 29 teachers was observed for only two days. Even though that raises a question about how well the observation data describe year-long behavior, the influence on that behavior of commercial materials used throughout the year reduces at least somewhat the negative impact of relatively brief observations on the findings. It is also relevant to note that what was seen in September (e.g., whole-class instruction in phonics) was equally common in May.

The fact that the data derive from interviews as well as from observations raises the question that all such data prompt: How objective and correct are they? In the case of the present study, the close correspondence between the descriptions of programs that originated in both the observations and the interviews supports the likelihood that the data about the content of programs as well as the factors that account for it are accurate. Although some discrepancies were found when the teachers were questioned about the way they organize a class for instruction, what the teachers said in interviews and what was seen in their classrooms was much more similar than dissimilar. Both sources of information, for example, confirmed the conclusions that most of what was done was directed to the whole class and that when anything "special" was provided for one or more children, it was usually designed to augment the progress of slower children or to help those who had been absent. That much less time went to challenging the most able children was also confirmed by the two sources of data.

Discussion

Findings will now be discussed in relation to the three questions that defined the purposes and development of the study.

What Is Done, and for What Amount of Time, to Prepare Kindergartners for Reading and to Teach Reading Itself?

Table 1 indicated that the 29 observed teachers spent 1,513 minutes on reading activities and that 70.9% of that time (1,074 minutes) went to topics related to phonics. On the surface, this requires concluding that phonics dominated the time spent on reading. What cannot be overlooked, however, is the time spent on other activities that have as much, or more, to do with helping children acquire reading ability as does phonics. The following, taken from Table 1 (Reading) and Table 2 (Reading-Related), constitute the "other activities" directed by the teachers: Names written words; writes requested words for children; explains language of instruction; shows left-to-right, top-to-bottom orientation of text; reads to children; provides world knowledge; attends to word meanings; and attends to listening comprehension. When the time spent on these nine activities is combined, the total turns out to be 1,618 minutes--more than the 1,074 minutes spent on phonics.

Given these comparative figures, why did the observations give the impression that most of what was done with reading pertained to phonics? One obvious reason lies in the fact that the 1,618 minutes just referred to covers nine different activities. Another explanation is proposed in the section that follows.

What Accounts for What is Done to Prepare Kindergartners for Reading and to Teach Reading Itself?

One indisputable finding from the present study is that commercial materials directed the phonics instruction that was seen. Equally indisputable is that the content of these materials affected both the items evaluated on report cards and first-grade teachers' expectations for kindergarten insofar as reading is concerned. All these facts combine to suggest why phonics was taught daily according to a pre-established schedule, commonly one letter and sound per week. The fact that phonics *was* on every teacher's daily schedule may explain, in turn, why other activities important for reading did not seem to be nearly so common even though a few consumed relatively large amounts of time. Take "Provides world knowledge" and "Attends to word meanings" as examples. Although the two consumed 933 minutes, they appeared to be far less common than phonics because time was not allotted to them in a regular, preplanned way. Instead, they usually constituted spontaneous responses to events or, for instance, to children's questions. Even though this may be the way such activities ought to proceed, it also accounts for the fact that they were not seen with any regularity.

The only occasions when attention to world knowledge and word meanings appeared to have been planned pertained to the activity "Reads to children." Such reading was seen during every observation (84 times); however, on only 13 occasions was anything done to prepare for, or follow up, the reading by doing something like attending to relevant world knowledge or teaching word meanings. Considering the many benefits that children can derive from being read to, the fact that "extras" were scarce was disappointing. Although none of the teachers ever mentioned insufficient time as the reason why something was or was not done, it is conceivable that at least some did less than was anticipated with activities like "reads to children" because they felt the pressures of a crowded curriculum. This is a possibility, given the fact that traditional kindergarten activities (e.g., show and tell, work with a calendar, snack time, art, and music) are still in the schedule.

How Do Children's Abilities Affect What is Done?

The fact that whole-class instruction prevailed and that morning and afternoon programs were the same are two reasons why it has to be concluded that differences in children's abilities had only minimal effects on the content and pacing of instruction. It can certainly be conjectured that the minimal accommodations were related to the expectation that all kindergartners would learn a prescribed amount of content that was defined by commercial materials and that was reinforced by basal reader tests, report card items, and first-grade teachers' expectations. It can also be conjectured that the same expectations accounted for the fact that low achievers were more likely to be helped than were high achievers likely to be challenged. As others have observed (e.g., Hoffman & Rutherford, 1984), when all students are expected to learn a specified amount of content, there is little incentive for teachers to work with individuals who have achieved, or are beyond, the prescribed objectives.

Even though it is very easy to understand why the observed teachers succumbed--willingly or otherwise--to commercialized programs, it is disappointing that none expressed concern about the uniform methodology that these programs support. Given the early childhood educator's traditional interest in child-centered curricula, it is surprising, for instance, that no teacher expressed a preference for more variation in the way children were introduced to reading. Such variation seems

highly desirable, as it provides the potential to accommodate differences in both abilities and interests.

The fact that nobody expressed support for variation in methodology as a way of accommodating differences is especially surprising when it is kept in mind that the enthusiastic endorsement of Gesell-like developmental tests was explained with references to the need to identify differences in entering kindergartners. Placed in juxtaposition, the use of such tests and the reliance on workbook-oriented instruction presented to an entire class have to be characterized as a major contradiction. The combination of these practices also shows disregard for the fact that "Readiness has as much to do with the teacher's willingness to adjust instruction as with the child's level of development" (Hall, Ribovich, & Ramig, 1979, p. 59).

Where Do We Go From Here?

Based on one study, it would be haughty rather than wise to recommend changes in what is currently being done with reading in the kindergarten. This one study will make a contribution, therefore, if it prompts other researchers to do additional studies. Ideally, such research will be carried out soon in case data from the present study do describe a large number of kindergartens. If they do, reform is mandatory.

One recommendation for future researchers is to focus on children as well as on teachers. The two-prong focus is recommended because, in the present study, focusing only on the teachers obscured how often the children spent time on workbook pages and other exercises, many of which pertained to phonics. This was the case because when children were occupied with such assignments, a teacher's behavior commonly fell into the category "Supervises." Studies confined to teacher behavior, therefore, do not tell the whole story.

In the meantime, reading and early childhood specialists need to work more in concert than now seems to be the case. One national survey (Bailey, Durkin, Nurss, & Stammer, 1982) has shown, for example, that the vast majority of reading methodology courses now available cover the kindergarten-grade 6 range, which hardly allows for much attention to the specific needs of kindergarten teachers. What must be kept in mind, however, is that more specialized courses can be offered only if early childhood education professors support them.

Admittedly, some early childhood specialists still believe it is unwise to include reading instruction in kindergarten. However, since anyone who visits kindergartens anywhere is bound to find some evidence of some kind of reading instruction, it behooves those who know the most about young children to get involved in efforts to improve what exists. As has been suggested, one essential step toward improvement is research that will show what is now taking place on a wide scale. Not to know leaves all of us uncertain about what needs to be done.

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Footnotes

[1]I wish to express appreciation for the persistently diligent help of Bonnie Kerr and Angela Rogers.

[2]This teacher's reason for opposing reading instruction was surprising because she used four workbooks (reading readiness, printing, language, and mathematics), all of which require children to return to the left as well as to proceed to the right. It seems appropriate to mention here that the number of workbooks used in the observed classrooms ranged from 1-5; the mean number was 2.7. Next to reading, mathematics workbooks were the most common. They were used by 18 teachers.

Table 1

Amount of Observed Teachers' Time Allotted to Reading Activities

Teacher Behavior	No. of Min. Observed	% of Total Time in Classrooms
Names letters	457	3.27
Teaches sounds that letters record	442	3.16
Names written words	211	1.51
Works on blending sounds	131	0.94
Writes requested words for children	96	0.69
Names numbers	93	0.66
Attends to auditory discrimination	40	0.29
Works on printing with attention going to:*	34	0.24
word identification	(20)	(0.14)
names of letters	(5)	(0.04)
names of numbers	(5)	(0.04)
relationship between sounds and spellings	(4)	(0.03)
space between words	(0)	(0.00)
punctuation	(0)	(0.00)
Explains language of instruction	3	0.02
Shows relationship between spoken and written word	2	0.01
Shows left-to-right, top-to-bottom orientation of text	2	0.01
Attends to visual discrimination	2	0.01
Explains what it means to "read"	0	0.00
Totals	1,513	10.81

*Numbers in parentheses indicate the time spent on six different topics when the teacher worked on printing.

Table 2

Amount of Teachers' Time Allotted to Reading-Related Activities

Teacher Behavior	No. of Min. Observed	% of Total Time in Classrooms
Reads to children	635	4.54
Provides world knowledge	358	2.56
Attends to word meanings	298	2.13
Attends to how to form letters	158	1.13
Attends to spelling	27	0.19
Attends to alphabetical order	17	0.12
Attends to listening comprehension	15	0.11
Shows/discusses usefulness of reading ability	0	0.00
Totals	1,508	10.78

Table 3

Information about 29 Interviewed Teachers

Professional Background	Number	Range	Mean
Have bachelor's degree	29		
Have master's degree	11		
Have work beyond master's degree	2		
No. of years of teaching experience		1-28	14.5
No. of years teaching kindergarten		1-21	10.4

Table 4

Information about 24 Interviewed Principals

Professional Background	Number	Range	Mean
Have bachelor's degree	24		
Have master's degree	24		
Have work beyond master's degree	11		
No. of years of teaching experience		1-21	8.0
Taught kindergarten	2		
Taught grades 1-3	1		
Taught grades 4-6	14		
Have never taught K-6	9		
No. of years as elementary admin.	24	1-33	11.5
No. of years of admin. beyond el.	8	2-29	8.0

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